ECO AMERICORPS NEWSLETTER

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Spring is a time when everything seems possible. Long-planned projects begin to come into focus, collaborative partnerships take flight and armies of supporting volunteers begin to muster. This is our ECO members' busiest season and marks the 3rd quarter of their 11-month commitment to Vermont's people and places. For the ECO AmeriCorps staff, this is an exciting time on the service calendar. While savoring the accomplishments of current ECO members, we begin to recruit the next cohort of highly qualified environmental leaders. When looking ahead becomes bittersweet, we are uplifted by the thought that without the efforts of our ECO's (past, present and future) many of the amazing projects currently underway in Vermont would not be possible.

The most rewarding part of working in the ECO AmeriCorps Program is watching our members grow into project leaders and hone the skills that will make them highly employable environmental professionals. It is deeply satisfying to witness the qualities that brought them to ECO in the first place--resourcefulness, a passion for giving back, and an unshakable commitment to healthy, functional ecosystems.

In this newsletter you will read about our program and member achievements. We are proud to say it is simply a snapshot, as the entirety of the ECO's impact on their communities is beyond measure.

It is a pleasure to do this service with you,



-Carey & Dustin



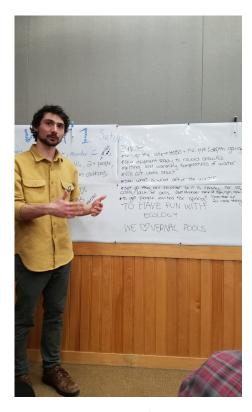
VERNAL POOL MONITORING PROJECT

Citizen science, public participation in scientific research, is a valuable asset to many different scientific investigations. Public involvement in science can both encourage curiosity and generate a greater understanding and respect for scientific endeavors. The field of conservation and wildlife biology is particularly accessible to people who want to participate in citizen science. Through apps like iNaturalist and eBird, the general public can catalog the flora and fauna that they find out and about, providing conservation biologists with valuable data that could aid their research. For more specific projects, organizations will sometimes recruit volunteers from the general public to collect data. ECO host site, the Vermont Center for Ecostudies (VCE), routinely recruits volunteers who provide a tremendous amount of support for some of their scientific research projects.

The Vernal Pool Monitoring Project (VPMon), managed by ECO AmeriCorps member Alex Wells, is one of VCE's projects that fosters citizen science. Vernal pools are small ephemeral wetlands which provide essential habitat for an array of wildlife such as breeding wood frogs, spotted salamanders, and fairy shrimp. As the Vernal Pool Monitoring Program Coordinator, Alex's role is to recruit and manage the volunteers, as well as educate them on how to assess the biological and physical metrics of vernal pools. Repeated monitoring of these fascinating ecosystems will increase our knowledge of these

wetlands and establish a baseline of data to compare to changes in the future. Due to the abundance and wide distribution of vernal pools in the state of Vermont, the success of VPMon relies heavily on citizen scientist volunteers to visit pools 4 times a year to collect data on biological and physical metrics.

During VPMon's first year, VCE's previous ECO member, Liza Morse, had twenty-two volunteers signed up to collect data in the spring. Thanks to Liza maintaining these volunteer connections with the program throughout the summer, fourteen of those twenty-two original volunteers decided to continue monitoring for the following year. At the beginning of his service last September, Alex had fourteen trained volunteers who were committed to monitor 6 pools in the spring. After conducting some outreach and setting up equipment in the fall, Alex managed to gain a few more volunteers to add eight more vernal pools to the study. During the winter, he put on workshops around the state to educate the volunteers on the methodology of the research and how to accurately collect data. These workshops piqued the interest of many people, bringing in around 200 to learn about vernal pools and how to monitor their health.



Alex Wells during one of his workshops, discussing methodology.

VERNAL POOL MONITORING PROJECT

Currently, at the end of the season, Alex manages 125 volunteers for VPMon, seven of which are kids. Thanks to all these volunteers, data was collected at 50 functional vernal pools and 3 nonfunctional vernal pools. It is a bit too early to tell how many full data sets there will be for this year, but so far, the analysis looks promising!

At the start of this year, Alex's personal goal was to have volunteers collect data for 15



ECO Member Alex Wells, setting up equipment in a vernal pool in the early winter.

vernal pools, and VCE's longer term goal was to collect data for 50 vernal pools. With the enthusiasm and commitment of many, many citizen scientists in Vermont, the program has reached its long-term goal in just the second year. Given the excitement and interest that many people expressed during Alex's workshops, it is likely that the volunteer base will continue to grow and exceed all expectations for the program.

An interactive database for vernal pools is in the works through a collaboration between VCE and the Department of Fish and Wildlife. This database, to be termed VP Atlas, will be accessible to the general public and will house both the mapping and monitoring aspects of VCE's vernal pool projects. Once the database is up and running, curious people can use it to find vernal pools near them, collect biological and physical data on these pools, and upload it to the database. Through this tool, citizen scientists will also be able to contribute to the mapping project by assessing potential pools for those biological and physical metrics.

The vernal pool monitoring project is a perfect example of the value of engaging the public in citizen science. Thanks to volunteers, Alex, and VCE, our understanding of these unique wetlands will only improve. Keeping citizens engaged in projects like VPMon will continue to ensure that the people of Vermont maintain their curiosity and respect for our surrounding natural environment and all its critters.

LA ROSA VOLUNTEER MONITORING

At the Vermont Department of Environmental Conservation (VTDEC), a small army of people located within the Watershed Management Division are committed to protecting, maintaining, enhancing, and restoring the quality of surface waters here in Vermont. Within the department, there are several different programs tasked with certain parts of this commitment. The Monitoring, Assessment, and Planning Program (MAPP) facilitates the monitoring of surface waters in Vermont as well as the development of tactical basin plans

that are used to identify projects protecting high quality surface waters and restoring impaired ones. With over 23,000 miles of rivers and streams in the state, even just monitoring those surface waters is a tremendous effort, which is why MAPP created a volunteer monitoring program in 2003 called the LaRosa Partnership Program.

The LaRosa Partnership Program (LPP) is a collaboration between watershed associations, monitoring groups, and MAPP. Since the beginning of the LPP, watershed associations and monitoring groups throughout the state have been implementing volunteer-based surface water monitoring projects for their local watersheds. By allowing



ECO members Jenevra, Liza, Christian, and Kristen at an LPP meeting in late March.

volunteers to engage with this project, organizations dedicated to improving water quality can alleviate the financial burden of water quality sampling. This allows local citizens to take part in a community-based effort

to improve our surface waters, get to know their watersheds firsthand, and learn about the issues surrounding water quality.



Kristen Switzer collecting a water sample.

Since the very first year of ECO AmeriCorps, members at watershed organizations have frequently participated in the LaRosa Partnership Program by taking water samples, organizing and managing volunteers, writing reports about results, and writing grants for laboratory analytical services of samples. This current service year, there are a total of eight ECO members participating in the LaRosa Partnership Program at various levels. Kristen Switzer, ECO member with MAPP at the VTDEC, has been essential to the LPP this year in many ways. She communicates regularly with LaRosa partners about deadlines, conducts stream walks and site visits with partners during sampling days, analyzes monitoring data, and has helped with final monitoring reports for the 2018 sampling year. Without Kristen's role in the

LA ROSA VOLUNTEER MONITORING



ECO member Jenevra water sampling for LPP in the Missisquoi River watershed

program during her service, the LPP would not be as effective and widespread as it currently is.

The other seven ECO members involved in LPP are widely distributed throughout the state. In the north, ECO member Liza Lemieux at the Franklin County Natural Resources Conservation District is monitoring 32 sites in the Black Creek, Hungerford Brook, and Deer Brook watersheds with the help of volunteers. ECO member Jenevra with the Missisquoi River Basin Association is monitoring 24 sites in the Missisquoi Watershed and ECO members Cassi and Catie are also sampling waters in the Franklin and St. Albans town areas. In the central/southern Vermont region, ECO members Allie and Christian are assisting with the LaRosa Partnership Program volunteer monitoring efforts in the White River watershed and the Otter Creek watershed. Down south in

Brattleboro, ECO member Gaynor with the Windham Regional Commission is gearing up to assist volunteers with monitoring of 33 different sites within the Connecticut River watershed. The extra support

provided to the LaRosa Partnership Program by ECO AmeriCorps members is indispensable, and the opportunity that the LPP provides ECO members is equally as critical to our program.

The water samples that have been collected in years past have been the much-needed scientific driver of water quality and river restoration projects. By collecting and analyzing this data, organizations can prioritize projects in their immediate watersheds to improve the quality of our surface waters. Partner-



ECO Member Liza Lemieux samples water at a stream in Franklin County, as a part of the LaRosa Partnership Program.

ships like the LaRosa Partnership Program can help ECO members meet their conservation goals and strengthen their capacity to get things done for the environment in Vermont.

PROGRAM ACCOMPLISHMENTS



ECO AmeriCorps member with the Lake Champlain Committee, Laura Pratt, organized an April Stools Day event for our northern regional gathering this Spring. We collected over 150 pounds of dog poop from the parks adjacent to the Winooski River. This was one of several April Stools Day events organized by Laura, bringing in over 70 volunteers and collecting almost 500 pounds of dog poop all together.

The northerly based ECO members with Winooski Mayor Kristine Lott during our Regional Gathering on April 2nd for April Stools Day.

For Earth Day this year, members had the opportunity to choose from several different events happening across the state:

- An invasive species removal up at Health Hero Farm on South Hero Island
- A tree planting with the Connecticut River Conservancy in Norwich, VT
- An invasive species removal and tree planting at Hubbard Park in Montpelier, hosted by ECO member Jac with Montpelier Parks
- An electronic waste collection event hosted by ECO member Theron with Central Vermont Solid Waste Management District.



ECO members Tommy, Hannah, Kristen, Allie, and Cassi during the Earth Day invasive pull at Health Hero Farm



ECO member Sujata helping out at the E-Waste event during Earth Day.

PROGRAM ACCOMPLISHMENTS

For Green Up Day on May 4th, ECO members took to the streets in their communities with the tell-tale green bags to Green Up Vermont!

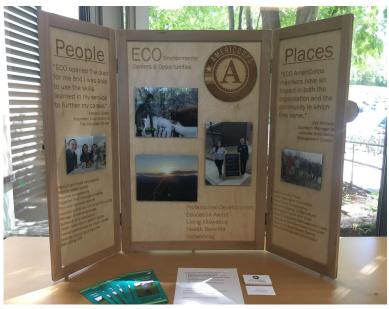


Burlington area ECO members Hannah, Tommy, Kristen, David, and Catie greening up down at the Burlington waterfront.



ECO member Christian greening up with his lovely pups!

In February, ECO Program Coordinator Dustin designed a marketing display to better represent the values ECO AmeriCorps holds. He gathered ECO members Jac Huettenmoser (Montpelier Parks) and Theron Lay-Sleeper (Central Vermont Solid Waste) to help turn the vision into a reality. With a budget of \$200 the team bought locally sourced cherry and birch to make up the body. The boards were laser engraved at Generator Makerspace in Burlington to feature kev program information and photos were printed on glass by a carbon neutral company. Jac and Theron's skills, resourcefulness and vision are now on full display in the lobby of the Agency of Natural Resources!



ECO AmeriCorps' new display board created by Theron, Jac, and Dustin!

EVENTS

It was a particularly wet and chilly spring, but the ECO group still managed to have a blast at our events!



We had a regional gathering in the Hartland, VT area where we paid a visit to the Vermont Institute of Natural Science and then helped out ECO member Jenevra's family with their sugaring operation while the season was in full swing. Pictured above is the group after collecting sap and top right is Jenevra on the tractor!





At a training in early May, ECO's had a great discussion about gender equity in the workplace, facilitated by Lindsay Lathrop and Change the Story Vermont (pictured on the bottom left). Later in the day we had some fun with the farm animals at Billings Farm & Museum! Below is member Sujata making friends with a goat!



LOOKING AHEAD

We are in our last quarter of service and have a few more exciting events! Later this month we have our overnight camping and service trip to Lake Shaftsbury State Park where we will be planting upwards of 250 trees! The following day we will be making our way to a Vermont Land Trust Conservation Easement Property to do some clearing out of invasive species.

ECO member Laura Pratt, with the Lake Champlain Committee (LCC) has organized and partnered with the DEC and ECO AmeriCorps for an invasive water chestnut pull in the St. Albans Bay for July 10th. On the right is the group after the water chestnut pull from last year, which was a successful and fun day on the water!



Previous ECO members after the water chestnut pull in 2018!

GET INVOLVED!

As our service year is coming to an end, some members are looking to get out of their host site for some independent service opportunities. Does your organization have an opportunity for any of our members? Reach out to Team Leader Hannah at Hannah.yates@partner.vermont.gov!

ACKNOWLEDGEMENTS

We would like to everyone who has participated in and helped out with our program this spring! Special thanks to Winooski Parks and Recreation, Kristine Lott, Lake Champlain Committee, Burlington Community sailing Center, Generator MakerSpace, Fracture, Connecticut River Conservancy, Health Hero Farm, Franklin County Natural Resources Conservation District, WCAX and Torrey Gaucher, Vermont Institute of Natural Sciences, The Wetmore's, Change the Story Vermont and Lindsey Lathrop, Billings Farm and Museum, Marsh-Billings-Rockefeller National Historic Park, SerVermont, Common Ground Center, Theresa Petzloldt, Montpelier Parks, Vermont Land Trust, Central Vermont Solid Waste Management District and everyone else who has supported our program and interacted with ECO AmeriCorps members during their service. We can't do this without your support!